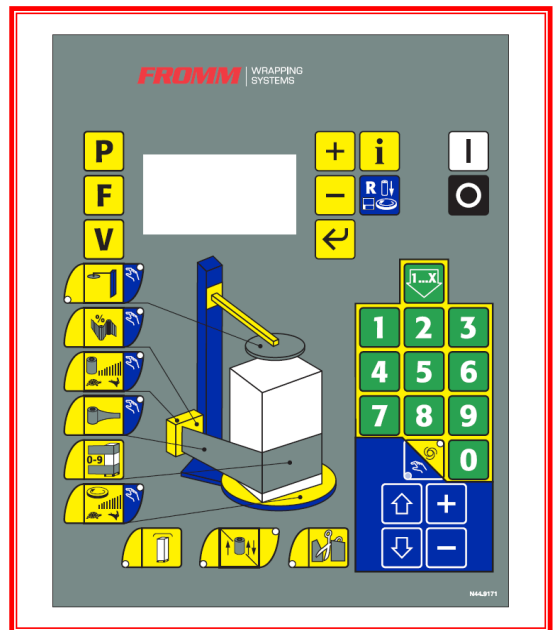


FROMM

Semi-Automatic WRAPPING MACHINE FS390 Series FS3.2780 V01 ORIGINAL MANUAL EN04

FS3.2780-Manual-34.111XXXXXXXXXX.V01-EN04.doc / ORIGINAL MANUAL © 06/19



INDEX

1	Preface
2	Technical files and Manufacturers
3	EC Declaration of Conformity
4	Identification plate
5	Machine data
6	General information
7	Machine dimensions
8	Safety instructions
9	Safety devices
10	Warnings
11	Technical data
12	Meaning of pictograms
13	Analysis of Residual risks
14	Main components
15	Handling and Transport
16	Installation Instructions
17	Assembly sequence and film feed / Cleaning the rubber rollers
18	Control panel and general information
19	Basic operating instructions
20	Machine decommissioning

BE Opgelet!

Leest U in elk geval de gebruiksaanwijzing, vooraleer de machine wordt opgesteld, geïnstalleerd en in gebruik genomen wordt. Daardoor zorgt U voor Uw eigen veiligheid en vermijdt U schade aan Uw machine.

DE Achtung!

Lesen Sie unbedingt die Gebrauchsanweisung vor Aufstellung-Installation-Inbetriebnahme. Dadurch schützen Sie sich und vermeiden Schäden an Ihrem Apparat.

DK OBS!

De bør absolut læse bruganvisningen, inden maskinen opstilles, installeres og tages i brug. Derved beskytter De Dem selv og undgår skader på maskinen.

ES Atención!

Resulta imprescindible leer las Instrucciones de manejo antes de proceder al Emplazamiento/ Instalacion/Puesta en servicio del aparato, con objeto de protegerse a si mismo y evitar el deterioro de la máquina debido a un manejo incorrecto.

FR Attention!

Lisez impérativement le mode d'emploi avant l'installation/la mise en service. Vous vous protégerez ainsi et éviterez des détériorations sur votre appareil.

GB Important!

Read the operating instructions carefully before installation and before using this machine for the first time.

You will avoid the risk of causing harm to yourself or to your machine in this way.

GR Προσοχή!

Πρίν την εγκατάσταση, σύνδεση και αρχική λειτουργία της συσκευής διαβάστε προσεκτικά τις οδηγίες χρήσης.

Έτσι προστατεύετε τον εαυτό σας και αποφεύγετε πιθανές βλάβες συσκευής.

IT Attenzione!

Leggere assolutamente le istruzioni d'uso prima di procedere a posizionamento – installazione - messa in funzione della macchina. In questo modo ci si protegge e si evitano danni all'apparecchio.

NO NB!

De må lese bruksanvisningen før oppstilling, installasjon og start av maskinen! Gjør det for å unngå skade på Dem selv og maskinen.

NL Let op!

Lees beslist de gebruiksaanwijzing voor het plaatsen, installeren en in gebruik nemen van uw machine. Dat is veiliger voor Uzelf en U voorkomt onnodige schade aan Uw machine.

PL Ważne!

Przed instalacją maszyny, bądź przed przystąpieniem do pracy z maszyną po raz pierwszy, należy dokładnie przeczytać i zapoznać się z niniejszą instrukcją obsługi.

W ten sposób uniknie się ryzyka mogącego spowodować uraz ciała bądź uszkodzenie maszyny.

PT Atenção!

Leia as instruções de utilização antes da montagem - instalação e - primeira utilização. Assim evita avarias no aparelho.

SE OBS!

Läs bruksanvisningen noga före uppställning, installation och användning. Ni förebygger därmed olycksrisker och undviker skador på maskinen.

FI Huomio!

Tutustukaa huolellisesti käyttöohjeeseen ennen laitteen asennusta jä käyttöönottoa.

Näin välttytte mahdollisilta vahingoilta käyttäes-sänne konetta.

MANDATORY

FROMM Wrapping Systems S.r.l.
Viale del Lavoro, 21
37013 Caprino Veronese (VR)
ITALY

Tel. +39 045 205 7300
Fax +39 045 205 7373

P.IVA IT 04146150232

www.fromm-stretch.com
info@fromm-stretch.com

MANUFACTURER

FROMM SLOVAKIA a.s.
Priemyselná 5885
SK-901 01 Malacky
(SLOVAK REPUBLIC)

VAT no. SK2022019109

DOCUMENTATION

For the spare parts, check the separately delivered spare-parts booklet.

Or download directly from our website:

<http://www.fromm-stretch.com>

Or contact your Fromm Distributor.

EC Declaration of Conformity

(EC machinery directive 2006/42/EC - Annex IIA)

The Supplier (manufacturer): **FROMM SLOVAKIA a.s.**
Priemysel'ná 5885
SK-901 01 Malacky
(SLOVAK REPUBLIC)

Agent: **FROMM Wrapping Systems S.r.l.**
Via del Lavoro 21
IT-37013 Caprino V.se (VR)
(ITALY)

Declares, under its responsibility, that the product:

Model: **FS390**

Machine type:

Serial no.:

Description: **Semi-automatic wrapping machine using stretch film**

has been manufactured in compliance with the following directives:

2006/42/EC (Directive)
2014/30/UE (Electromagnetic compatibility)

and in compliance with the following harmonised and national standards:

EN 61000-6-2:-2005
EN 61000-6-4:-2007+A1:2011
EN 415-6-2013

01/01/2019

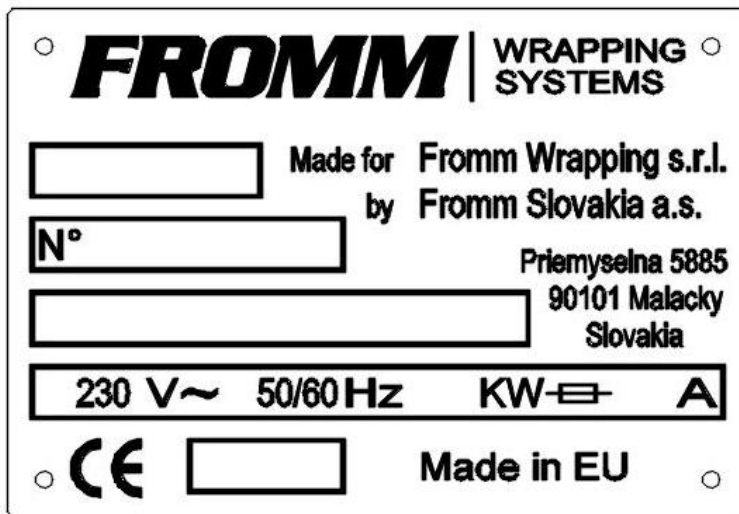
Name: **Mr. Reinhard Fromm**
Function: **Legal Representative**



A handwritten signature in blue ink, appearing to read 'R. Fromm', is written over a light blue rectangular background.

IDENTIFICATION PLATE

The serial identification plate with the following information is affixed to the back of the column.



Name of manufacturer	: FROMM Slovakia a.s.
Type	: Machine Type.
Serial number	: Manufacturer's production number
Voltage	: Power supply voltage.
Power	: Power consumption
Fuse	: 10 Amp
Year of manufacture	: year in which the machine was built by the manufacturer

Furthermore, the identification plate shows the CE mark:

CE mark

The machine meets the applicable requirements as provided for in the EC machinery directives:

2006/42/EC	(Directive)
2004/108/EC	(Electromagnetic compatibility)
2006/95/EC	(Low voltage)

- It is strictly forbidden to remove the identification plate or to replace it with one that is similar or of a different type.
- If the identification plate should become damaged for any reason, immediately contact the MANUFACTURER.

MACHINE DATA

Machine item

34.1	1	1									
------	---	---	--	--	--	--	--	--	--	--	--

Serial number

		.					
--	--	---	--	--	--	--	--

Manufactured by

--

Distributed by

--

 Date

--

UNITS:

OPERATING PANEL

TURNTABLE

COLUMN

CARRIAGE

PRESS

VARIOUS

OPTIONS

GENERAL INFORMATION

- This manual only covers the semi-automatic wrapping machine for pallets, shown on page one, as supplied by FROMM WRAPPING SYSTEMS.
- THAT DESCRIBED IN THIS MANUAL IS VALID IF APPLIED!
- This machine with turntable can be installed on the floor. As an optional, it can be equipped with a frame for floor positioning.
- Lay the film prior to application on the goods (stretching), reduces packaging costs and has a better impact on the environment (option available depending on the model).
- Refer to the technical data chapter that describes installation in detail and to the chapter on overall dimensions of the system.
- Carefully read at least the **HANDLING AND TRANSPORT** and **INSTALLATION** chapters.
- For safety reasons, we recommend you read the entire instruction manual before commissioning/installation of the machine, repairs and maintenance operations.
- Pay careful attention to the **SAFETY INSTRUCTIONS** and **WARNINGS** chapters that illustrate the intended uses and the dangerous situations that could not be avoided during designing and manufacturing of the wrapping machine.
- It is strictly forbidden to tamper with the machine. It is forbidden to feed the machine with non-intended, corrosive or flammable products as the machine is not protected against explosions.
- The warranty period is ensured if the following are respected: use for which the machine has been designed, manufactured and equipped with protection devices, the recommendations, information (including general issues), details and technical limits for health and safety provided by the Manufacturer to the User with the user instructions.

We do not accept warranty claims if original spare parts have not been used.

- If the machine is used beyond the operating limits and if the manufacturer's features are in some way altered, this is considered as improper use. In this case, the MANUFACTURER is not liable for injuries/damage to people/things caused by failure to follow these guidelines.
- For the above-mentioned points, we recommend that customers always contact the Assistance Service.

ASSISTANCE SERVICE

For any problems, contact:

SPARE PARTS

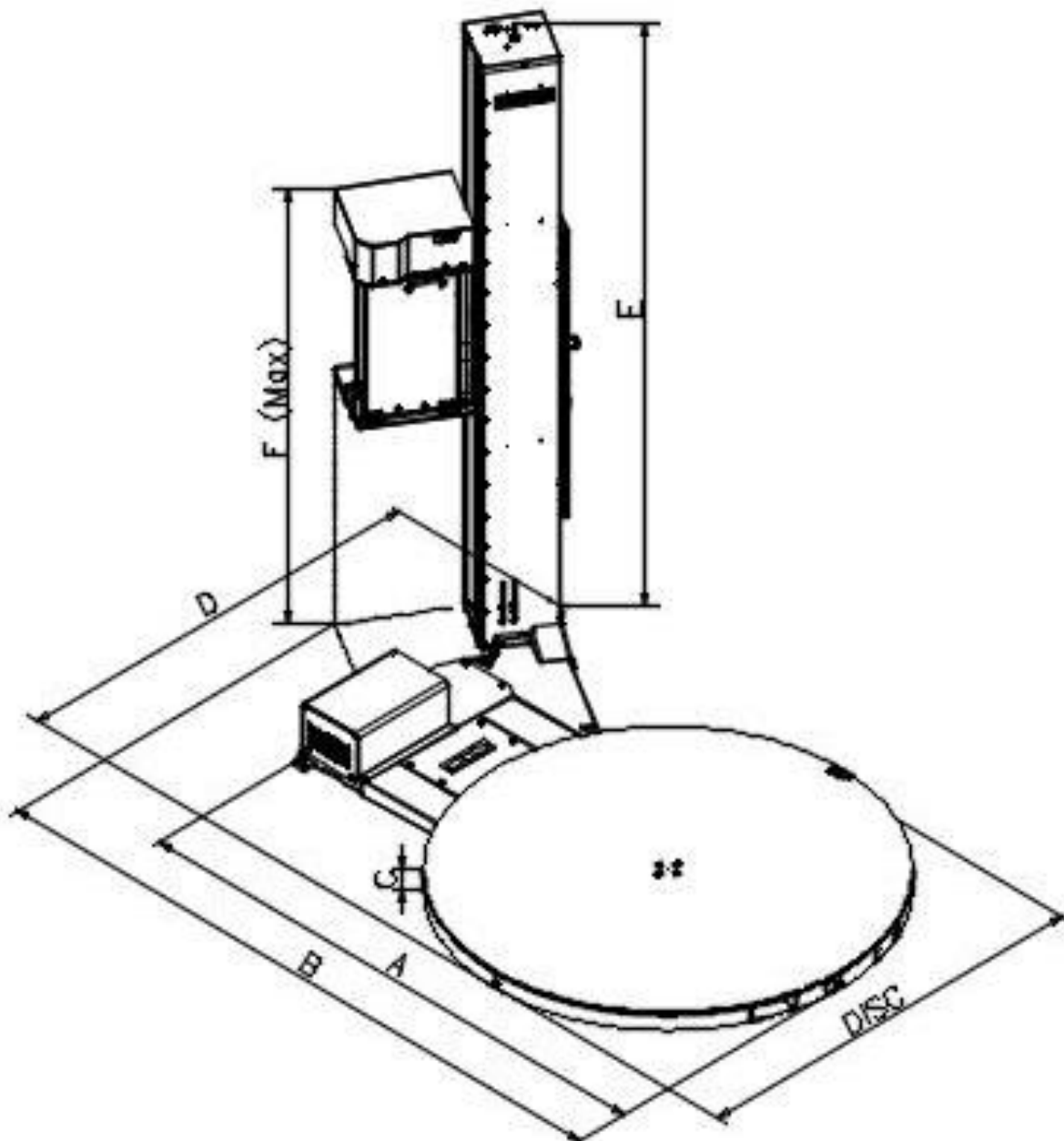
The spare parts can be ordered from:

DIMENSIONS / DIAGRAM

Refer to the following diagram for the dimensions:

DISC	Ø1500	Ø1650	Ø1800	Ø2200
A	2065	2225	2375	2775
B	2636	2806	2946	3246
C	73	73	73	73
D	1634	1714	1789	1989

H Max	2250	2500	2800	3050
FLM	2237	2487	2787	3037
E	2540	2790	3090	3340
F (Carriage 2 meters)	2480	2740	3040	3290
F (Carriage 1 meter)				

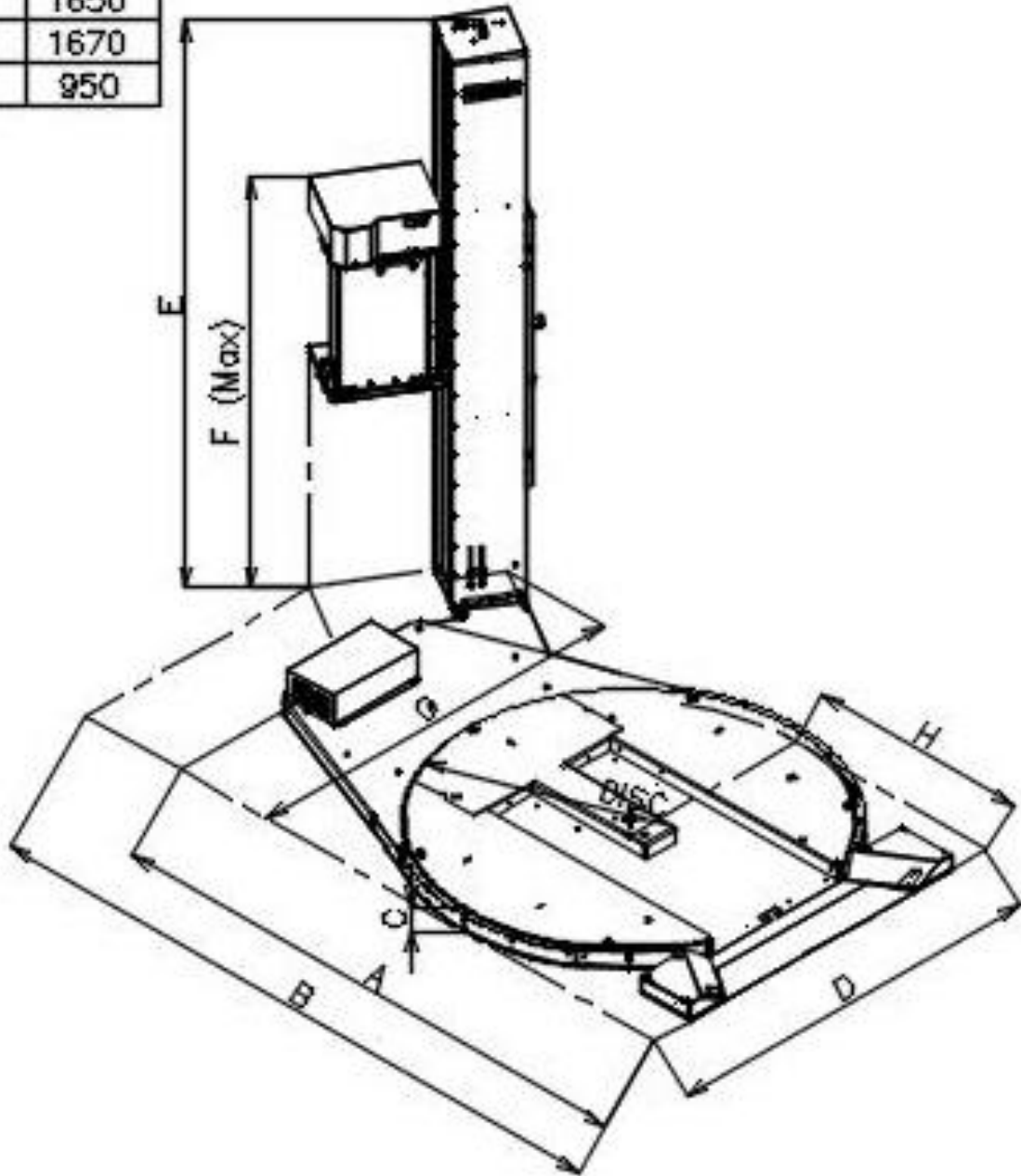


DIMENSIONS / DIAGRAM

Refer to the following diagram of the open turntable for the dimensions.

DISC	Ø1585
A	2360
B	2820
C	77
D	1650
G	1670
H	950

H Max Film	2250	2500	2800	3050
E	2237	2487	2787	3037
F (carriage 2 motors)	2540	2790	3090	3340
F (carriage 1 motor)	2490	2740	3040	3290



SAFETY INSTRUCTIONS



The following conditions must always be met unless otherwise indicated in other instructions in this manual.

- This wrapping machine has been supplied by FROMM WRAPPING SYSTEMS and can be used only to wrap pallets that meet the requirements indicated in the description of the machine in the TECHNICAL DATA chapter.
Any other uses of the machine, other than those described, can constitute a damage risk for the machine and/or danger to the safety of the operator and anyone else near the machine.
- Carefully read this manual before using the machine and understand the residual risks that cannot be excluded during development of this machine.
- The machine can be used only by suitably trained personnel.
- The electrical interventions on the machine must be carried out only by suitably trained electricians.
- During installation of the machine, as a precaution, always check that the controls and the safety systems are mounted correctly and operate efficiently. If any malfunctions are detected, immediately stop the production cycle and request the intervention of an authorised technical assistance service.
- Check the nameplates. If they are extremely damaged, replace them with the utmost urgency and directly and only contact the authorised technical assistance service or the Manufacturer.
- During adjustment and maintenance operations, all requirements described in the **MAINTENANCE INSTRUCTIONS** chapter must be met.
- The manufacturer will commission the machine only when connection to the electrical network meets the standards applicable in the country of delivery.
- The supplier will provide training for the assigned personnel, otherwise training must be duly performed by the installation company.
- The machines are designed and manufactured in compliance with the safety laws in force, therefore, if the machine is used correctly, no fire risks are foreseen.
- To prevent any **fire** risk, the equipment within the machine's user company is sufficient to deal with any problems caused by the material used for the process.
- In the event of fire, we recommend you use extinguishers containing CO₂ to avoid damaging the equipment and the electrical system.
- In the event of **flooding**, it is essential to disconnect the electrical power supply before entering the room where the machine is installed.
- In the event of flooding, contact the MANUFACTURER'S customers technical assistance service.
- We recommend you avoid wearing unsuitable clothing (with buttons, flaps) or accessories (bracelets, watches, rings, etc.) during use of the machine.

SAFETY INSTRUCTIONS



MACHINE USES NOT ALLOWED

The following conditions must always be met unless otherwise indicated in other instructions in this manual.

- The machine is not equipped with components that have special disposal problems.
- Do not stand near the turntable when the machine is in operation. (Use the emergency stop button to immediately stop the machine.)
- Do not touch the pallet when the machine is in operation. (Use the emergency stop button to immediately stop the machine.)
- Do not put your hand or fingers between the column and the carriage when the machine is in operation. (Use the emergency stop button to immediately stop the machine.)
- Do not put your hand or fingers in the column. (Use the emergency stop button to immediately stop the machine.)
- Do not put your hand or fingers near the wheels that move the carriage. (Use the emergency stop button to immediately stop the machine.)
- Do not put your hand or fingers in the electrical panel. (Use the emergency stop button to immediately stop the machine.)
- Do not cross the space between the column and the turntable. (Use the emergency stop button to immediately stop the machine.)
- Do not put your fingers in the space between the turntable and the disk. (Use the emergency stop button to immediately stop the machine.)
- People must not climb on the transport vehicles, unless otherwise indicated.
- People must not be above the transport vehicles.
- Do not put tools or components on the machine.
- The safety devices must not be bypassed or turned off.

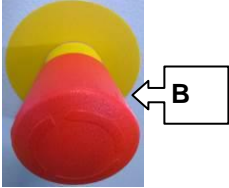
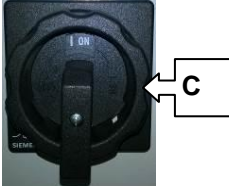

SAFETY DEVICES



We would like to again highlight how all safety devices have been installed for operator safety, etc. and must not be manipulated or excluded from the operations.

Refer to the drawings below and to the notes applied.

Observe the control panel

	<p>A = Acoustic signal</p> <p>B = Emergency stop button</p>  <p>C = Main switch</p> 	<p>Main switch: The power (1x230V) is supplied by turning on the main switch. The voltage for the various control parts (24Vdc) is also supplied by turning on the machine.</p> <p>D= Anti-crushing device</p> <p>E = Parachute system</p> <p>R= Reset Button</p> 
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<p>D = Anti-crushing device</p>	<p>This mobile anti-crushing device works with the aid of 4 mechanical sensors. Each time a foreign body touches the underside of the carriage, the latter reverses direction and simultaneously sends a signal to the turntable to stop in phase.</p>
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<p>D = Anti-crushing device</p>	<p>This safety device works with the aid of a photocell and a reflector. Each time a foreign body gets between the photocell and the reflector, a signal is sent to the turntable to immediately stop.</p>
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<p>E = Parachute system</p>	<p>This mechanical safety device, parachute system, functions whenever the belt is not tensioned, in other words it stops the carriage from falling.</p>
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WARNINGS

- The machine's average noise level is less than 80 dB. Depending on the film applied, during the pallet wrapping phase a maximum noise level of 80 dB may be recorded. We recommend using noise protection safety devices.
- We would like to remind you that the film (roll) can contain an electrostatic charge.
- Pay close attention to the electrical installation. Only suitably trained personnel can perform these interventions only after having taken all necessary safety measures described in the **SAFETY INSTRUCTIONS** chapter.
- It is necessary to consider all European safety requirements and standards should the machine require adjusting; the safety measures and protective covers should also be adjusted.
- Touching the electrical system constitutes a danger to personnel safety.
- The people who modify or adjust the machine (functions, operation, principles) are entirely responsible for these modifications or adjustments.
- Take all necessary safety measures when intervening on the machine, especially during maintenance operations and resolution of faults.
Ensure that the main switch is off (0) and padlocked (if possible) or that the power cable is disconnected to prevent other personnel from using the machine during the interventions. Furthermore, all safety measures and standards in force must be taken and complied with during these activities.
- Handling or approaching the machine can create dangerous situations if the machine is in operation. These actions are forbidden!



- Comply with all recommendations and laws relating to working conditions and safety in the workplace.
- There is an acoustic signal device installed in the control cabinet that activates briefly, as a warning, before the machine is operated.






TECHNICAL DATA

Machine	<ul style="list-style-type: none"> - Turntable maximum speed - Carriage maximum speed - Capacity of pallets per day - Hours of operation - FS390 Sealing height - Max . load capacity in Ø1500mm - Max . load capacity in Ø1650mm - Max . load capacity in Ø1650mm - Max . load capacity in Ø1800mm - Max . load capacity in Ø2200mm 	<p>maximum 15 rpm 0.08 meters per second depends on high/low rpm, pallet height and wrapping mode 8 h/day, 5 days/week maximum of 2250mm / 88.58" maximum of 2500mm / 98.42" maximum of 2800mm / 110.23" maximum of 3050mm / 120.07"</p> <p>1500kg 2000kg Open turntable 1250kg 2000kg 2000kg</p>
Conditions	<ul style="list-style-type: none"> - Environmental temperature - Environment 	<p>+ 5 to +45°C clean, dry and not corrosive</p>
Electrical System	<ul style="list-style-type: none"> - Power supply - Control voltage - Turntable motor - Film carriage motor - Installed power - Electrical panel protection class 	<p>1 x 230 V 50/60Hz 24 Vdc 0.55 kW 0.25kW 1.5 kW IP 54</p>
Goods on pallet-	<ul style="list-style-type: none"> - Pallet dimensions (Length x width) Ø1500mm - Pallet dimensions (Length x width) Ø1650mm - Pallet dimensions (Length x width) Ø1800mm - Pallet dimensions (Length x width) Ø2200mm - FS390 Height with load (including pallet): 	<p>800 x 1200 x 140 31.5" x 47.24" x 5.51"</p> <p>1100 x 1200 x 140mm 43.30" x 47.24" x 5.51"</p> <p>1200 x 1300 x 140mm 47.24" x 51.18" x 5.51"</p> <p>1500 x 1500 x 140 mm 59,05" x 59,05" x 5,51"</p> <p>min. 500mm / max. 2250mm min. 19.69" / max. 88.58"</p> <p>min. 500mm / max. 2500mm min. 19.69" / max. 98.42"</p> <p>min. 500mm / max. 2800mm min. 19.69" / max. 110.23"</p> <p>min. 500mm / max. 3050mm min. 19.69" / max. 120.07"</p>
Colours	<ul style="list-style-type: none"> - Base, column - Turntable disk - Film carriage frame - Control station 	<p>: Blue, RAL 5010 : Yellow, RAL 1021 : Yellow, RAL 1021 : Grey, RAL 7032</p>


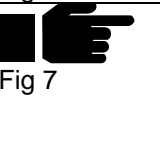
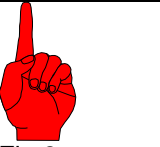
If you have to work with products of a different type than previously indicated, contact the **MANUFACTURER'S** technical assistance service to receive written authorisation.

MEANING OF PICTOGRAMS


DANGER SIGNS

 Fig 1	Figure 1: DANGER High voltage.
 Fig 2	Figure 2: General warning sign.
 Fig 3	Figure 3: Hands crushing risk.
 Fig 4	Figure 4: Hands and feet crushing risks.
 Fig 5	Figure 5: Falling hazard.

PROHIBITION SIGNS

 Fig 6	Figure 6: Identifies situations in which the SUPPLIER must be contacted.
 Fig 7	Figure 7: It is important that the guidelines are carefully observed. Machine operators could otherwise be at risk, the consequence of which could make the warranty null and void with no chance of claiming from FROMM WRAPPING SYSTEMS .
 Fig 8	Figure 8: Operations that must not be performed.

CE-MARK

 Fig 9	Figure 9: The machine complies with the applicable requirements, as stated in the EC machinery directives.
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ANALYSIS OF RESIDUAL RISKS

The residual risks, divided by the centre of danger, are as follows:

Reel, film press and film feed installation: the residual risk is associated with film installation and replacement.

Carefully follow the instructions in the user and maintenance manual.

Cutting devices: the residual risk is associated with maintenance.

Carefully follow the instructions in the user and maintenance manual.

Turntable: the residual risk is associated with contact with lower limbs, impact with the product and crushing between the product and the carriage.

Slipping, tripping and falling: Pay attention to the product loading operations.

Carefully follow the operating procedures in the user and maintenance manual.

Maintenance operations: the maintenance operations must be performed only by FROMM ASSISTANCE SERVICE specialists.

Keep device pressed (optional): the residual risk is associated with the risk of being crushed between the turntable and the product and between the carriage and the bottom part of the machine.

Carefully follow the operating procedures in the user and maintenance manual.

Dangerous voltages and currents inside the electrical cabinets and boxes.

Maintenance is forbidden to technicians not working for FROMM.

The residual risk is associated with product wrapping.

Consider the possible solutions, depending on the product packaged, as indicated in UNI EN ISO 415-6: 2010.

PREVENTIVE AND TOTAL SAFETY MEASURES

1. Appropriate installation of the machine;
2. Lighting suitable for work;
3. Protection / isolation of all moving parts against accidental contacts;
4. Creation of protective shields to prevent material from being thrown out of the machine;
5. Absorption and/or localised suction systems for dusts or various emissions;
6. Adequate and activated mechanical and electrical protection in the machine;
7. Start-up devices to be activated only deliberately;
8. Emergency button that is easily accessible, recognisable, operable, etc.;
9. Correct and efficient power supply connection, isolation of cables and of live parts;
10. Use of suitable safety and protective signs with indications of danger and any DPI in use;
11. Evident prohibition of cleaning and maintenance operations when the machine is in motion;
12. Evident prohibition of removal of protective and safety devices;
13. Information, instruction and training of personnel;
14. Use of appropriate work instructions, practices and procedures;
15. Tests, use, checks, inspections and frequent maintenance as specified in the user and maintenance instructions.

INSTRUCTIONS FOR SAFE USE:

Use the DPI foreseen in the work area before starting work (ear plugs, gloves, safety glasses, shoes).

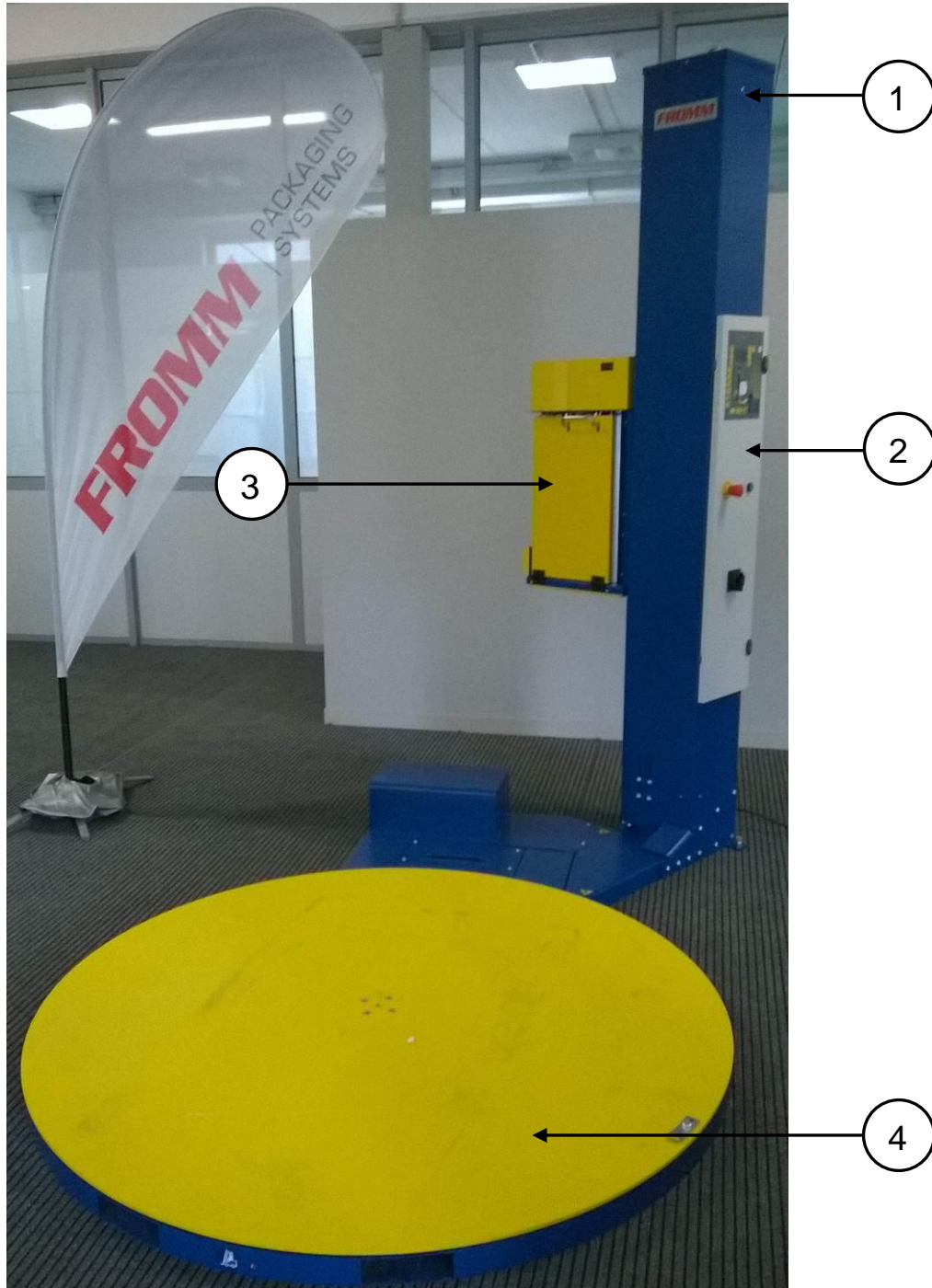
1. Check that the space around the machine is not obstructed;
2. Check escape methods and that the escape routes are free;
3. Clean and tidy up your work area;
4. Use work equipment correctly;
5. In the event of danger, immediately notify the supervisor;
6. Check that the protective devices are enabled.

MAIN COMPONENTS

The machine, when supplied by the factory, consists of the following components in general form for our FS390 series:

- 1- Column
- 2- Operating panel
- 3- Film holder carriage
- 4- Turntable

The machine's function is to wrap pallets with stretch film, which is through rotation of the disk and movement of the carriage up and down the column



HANDLING AND TRANSPORT

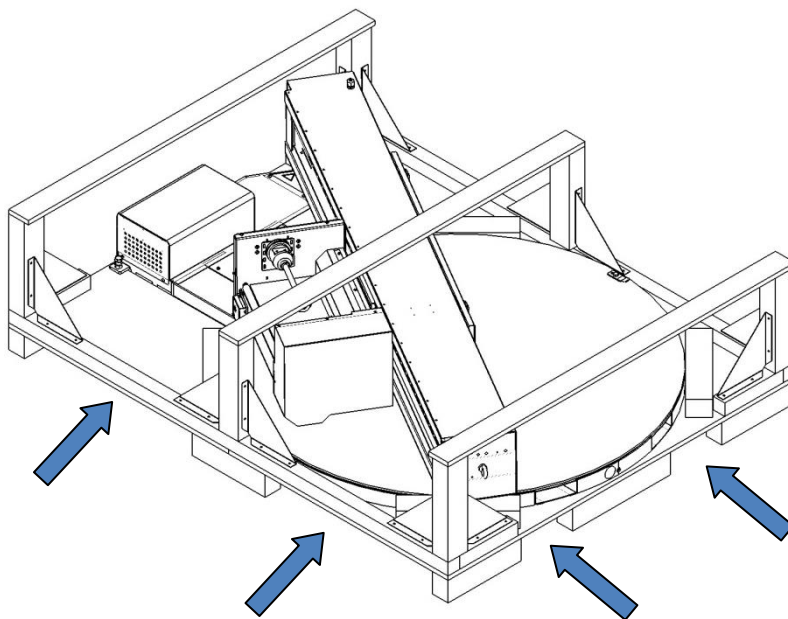


Lifting and handling the packaging in a wooden crate with forklift truck

Lifting and transport must be carried out with the aid of a forklift truck suitable for the weight of the machine, of the accessories and of the packaging.

Always check in advance that there is enough space for the operations.

- Insert the forks of the forklift truck under the base (arrows).
- Ascertain stability then lift the load and transport it to the packaging removal area, avoiding jerks and dangerous manoeuvres.



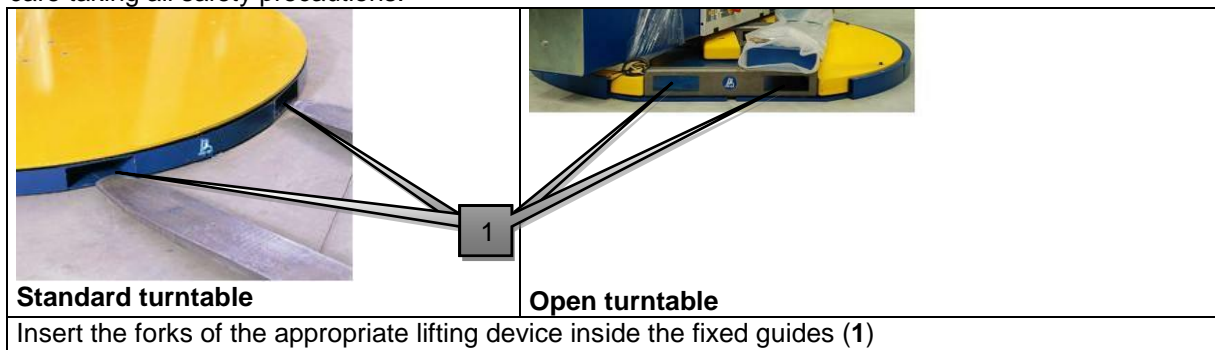
For transport and storage of the machine, the following measures must be taken:

- It is necessary to ensure a storage environment suitable for the packaging, in the event of long-term storage.

The reinforcement straps, if used to secure some components, must not be tightened on delicate components such as the control panel, the ventilation grilles, etc.

Handling the machine without the packaging

In the event some of the machine's components are shipped with the machine itself, handle them with care taking all safety precautions.



Insert the forks of the appropriate lifting device inside the fixed guides (1)

Storage of the machine

The machine and any components stored with it are protected by a plastic cover that does not guarantee long-term storage conditions.

The machine must never be stacked and does not support external loads.

INSTALLATION INSTRUCTIONS



CAUTION!

All operations indicated can be performed exclusively under the supervision of the manufacturer's trained personnel or of its agents!

Refer to the diagram in the **SAFETY DEVICES** paragraph for the numbers of the indicated positions.

General guidelines

Always check that the minimum conditions for placement and operation of the machine are met, especially: environmental conditions (suitable floor), temperature, humidity, lighting and suitability of the area chosen.

Installation is strictly forbidden in environments subject to a risk of flooding, explosion or fire.

The area required for installation of the wrapping machine corresponds to the dimensions of the machine and the space for its installation and operation.

The machine must be installed by trained personnel, coordinated directly with the authorised Technical Service, in total compliance with the following instructions, as well as with the health and safety laws in force.

As a precaution, always check for any damage that may have occurred during transport or during the handling operations.

If necessary, contact the Manufacturer directly.

Temperature

For safety reasons, make sure that the machine operates at an environmental temperature in the range of +5° / +30°C.

If different values are measured, urgently contact the Authorised Technical Service.

Work areas

It is strictly forbidden to place and/or use the machine if the environmental conditions constitute a potential risk of explosion or flammability.

Make sure there is no concentration of dusts, gas, fumes, or dangerous particles, electrostatic fields, excessive electromagnetic flux, or anything else that could be harmful to exposed people or to correct operation of the machine.

Always comply with the health and safety laws in force.

The machine must be positioned on a flat, rigid, concrete surface without vibrations.

Do not improperly access the top components of the machine.

Energy sources

The customer must provide a cable suitable for the power supply voltage requested for the control cabinet with wire diameter able to manage the total voltage requested, as indicated in the **TECHNICAL DATA** chapter.

The wrapping machine must be connected preferably to the customer's wall socket with a cable and standard EEC plug, with a 16A (slow) fuse.

For information on the correct plug, refer to the **TECHNICAL DATA** chapter.

If necessary, the customer must provide a network switch that precedes the plug.

The power supply must comply with the applicable standards in terms of voltage variations allowed, voltage fluctuation, generation of waves, reduction of high harmonics, etc.

INSTALLATION INSTRUCTIONS



CAUTION!

All operations indicated can be performed exclusively under the supervision of the manufacturer's trained personnel or of its agents!

THAT INDICATED IS VALID IF APPLIED!

For shipping requirements, the column and the carriage (Fig. 1) are usually shipped in the following way: the column in horizontal position and the carriage assembled on the column. Consequently, the column and the carriage must be repositioned during installation of the machine.

Column positioning:

- After having positioned the machine, lift the column (possibly with the aid of a forklift truck or bridge crane and using the eyelet above the column) by rotating it around the hubs (Fig.2) that have been specially adjusted, then position the column perpendicular to the turntable;
- Fasten the column upright, with respect to the relative surface, using the provided screws and tighten them (Fig.3/4/5/6/7);

Photo of FS390 standard wrapping machine (Fig. 1):

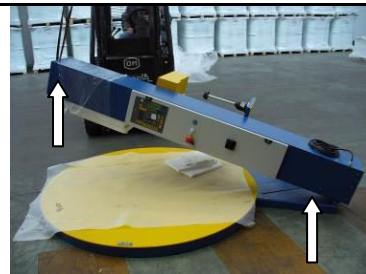


Fig.2



Fig.3



Fig.4



Fig.5



Fig.6



Fig.7

ASSEMBLY SEQUENCE



1. Check operation of the MAIN SWITCH (Fig.1)
2. Check operation of the EMERGENCY BUTTON (Fig.2) and RESET BUTTON (Fig.3)



Fig.1



Fig.2



Fig.3

3. Check operation of the machine's SAFETY PROTECTIONS (Fig.1 / 2)



Fig.1 / Carriage:
Anti-crushing device

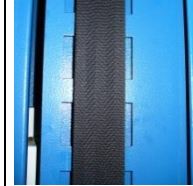


Fig.2 / Column:
Parachute system /
Anti-crushing device

4. Check operation of the SAFETY DEVICE for the horseshoe (Fig.1 / 2)



Fig. 1



Fig. 2



- If you place an obstacle between the photocell and the reflector, the machine must not start (1). (Fig.1).
- Start the machine and, during rotation, place a mechanical block in position 2. (Fig.2). The machine must stop in emergency.

5. Check operation of CARRIAGE MOVEMENT (Fig.1 / 2 / 3)



Fig.1 / Manual movement



Fig.2 / UP



Fig.3 / DOWN

6. Check operation of the TOP PROXIMITY SENSOR and BOTTOM LIMIT SWITCH of the carriage's position (Fig.1 / 2)

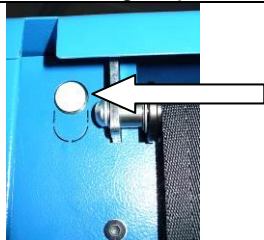


Fig 1

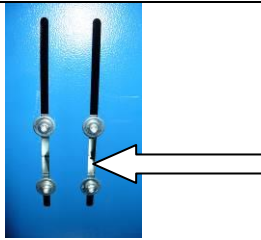











Fig 2

ASSEMBLY SEQUENCE

7. Check operation of the PHOTOCCELL (Fig.1 / 2)		
		
Fig. 1	Fig.2	
8. Check operation of the REEL FEED SYSTEM (Fig.1 / 2)		
		
Fig. 1	Fig. 2	
9. Check operation of the DOOR OPENING/CLOSING SYSTEM (Fig.1 / 2)		
		
Fig. 1	Fig. 2	
10. Check operation of the TURNTABLES' ROTATION (Fig.1 / 2)		
		
Fig.1 / Manual movement	Fig.2 / Slow rotation	
11. Check operation of the MACHINE'S RESET BUTTON (Fig.1)		
		
Fig.1 / Reset function		

ASSEMBLY SEQUENCE

12. Check operation of the PROXIMITY SENSOR for bottom/top wrapping and of the zero position (Fig.1)



Fig 1

1



13. Check operation of the switches for column/carriage/turntable inverter (Fig.1 / 2 /3)



Fig.1 (Q1) Column Inverter
If you close this switch, power to the inverter for movement of the carriage up/down the column is closed.



Fig.2 (Q2) Carriage Inverter
If you close this switch, power to the carriage's Feed/Brake (carriage's right roller) inverter is closed.



Fig.3 (Q3) Turntable Inverter
If you close this turntable switch, power to the Brake (carriage's left roller) inverter is also closed.

FILM FEED



Film

- LLDPE material
- Roll internal diameter
- Roll external diameter
- Film width

Max. 35 μ / 0,000138"
 76.2 mm / 3"
 Max. 250 mm / 11.20"
 Max. 500 mm / 19.69"

IMPORTANT: CLEANING THE RUBBER ROLLERS

The stretchable film releases deposits of silicone on the rubber rollers (depending on the film used).

It is very important that the rubber rollers are cleaned periodically with alcohol, in this way the normal adhesiveness between the roll and the film will be restored.

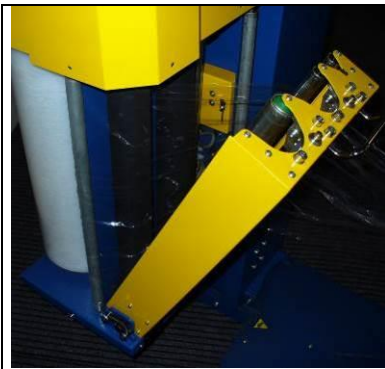


Fig.1



Fig.2



Fig.3

If you have to work with products of a different type than previously indicated, contact the **MANUFACTURER'S** technical assistance service to receive written authorisation.

NEXT PAGE CAUTION! AFTER FIRST INSTALLATION.

CAUTION!

After first installation

Follow this procedure before turning the machine on

- Check that the emergency button is released;
- Turn the machine on;
- Press the reset button;
- Wait 5 seconds and perform the first rotation in manual mode;
- If the turntable rotates, follow the procedure below

After machine installation or maintenance, follow this procedure to check the efficiency of the safety devices such as, for example:

- ✓ **Interconnection of the operator's anti-crushing protective guard**
- ✓ **Interconnection of the anti-crushing horseshoe entrance safety sensor**
- ✓ **Emergency button**

Check the efficiency of the carriage's anti-crushing movable protective guard:

- Start the machine
- Trigger the operator's protective guard

Check that the carriage reverses its direction for about 3 seconds and that the turntable starts slowing down and stops within a few seconds.

Check the efficiency of the anti-crushing horseshoe entrance safety sensor:

- Start the machine
- Place a mechanical block at the horseshoe entrance (between the blue guards)

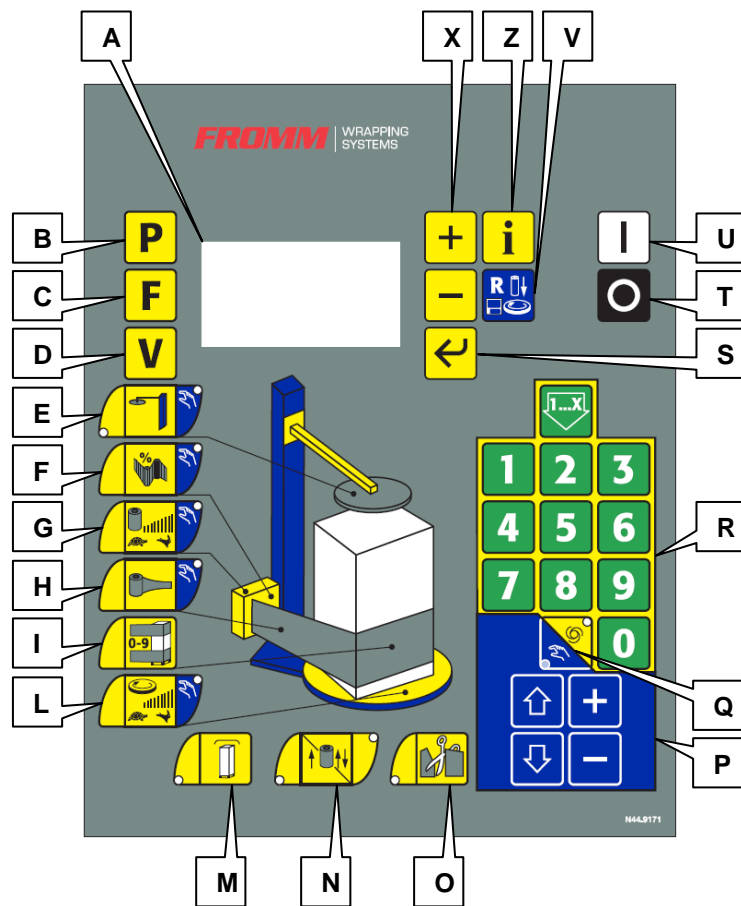
Check that the turntable stops within a few fractions of a second.

Check efficiency of the mushroom button (Emergency stop):

- Start the machine
- Press the mushroom emergency button

Check that the machine stops within a few fractions of a second.

CONTROL PANEL



INDICATIONS

CYCLE ACTIVE, START ASCENT

An acoustic signal device has been installed in the electrical panel. It activates before cycle start and lasts a few seconds as a warning each time the automatic program is run. The operator will therefore be able to exit the danger zone before the machine starts operation.



The machine will start operating only after this period has elapsed.

MACHINE ALARMS / RESET

If the emergency stop or any other safety device is triggered, the wrapping machine's automatic program will stop; this can be ascertained also on the control panel's display. Wrapping can resume only after having removed the cause of the error and pressed the Reset button on the electrical cabinet. By doing this, the "fault" is reset and power is restored, obviously assuming that the emergency button has been released or that the cause of the "fault" that triggered the Error has been solved.

The turntable and the carriage return to the machine's zero position.

FS390 Control panel

- A= multi-function display.
- B= Program.
- C= Special Function.
- D= Value.
- E= **Top-press function.**
- F= Pre-stretch key.
- G= Carriage speed key.
- H= Stretch key.
- I= Top and bottom wrapping key.
- L= turntable speed key.
- M= **Top-sheet function.**
- N= **Single wrapping and double wrapping function.**
- O= **film cutting function.**
- P= manual keys.
- Q=Automatic / Manual selection key.
- R= Saved cycles start-up keys.
- S= confirmation key of indication highlighted on display.
- T= Stop key.
- U= Start key.
- V= Reset key, starts the machine at zero point.
- Z= information key.
- X= press  and  to Increase or decrease the indication highlighted on the display.

ERRORS

- E1: Inverter error
- E2: Film finished or broken
- E3: Emergency stop
- E4: Door open
- E5: Protection sensors
- E6: No pallet detected
- E7: Turntable safety
- E8: Belt safety

WARNING

Contact maintenance 


GENERAL INFORMATION


SETTING PARAMETERS FROM DIRECT KEY IN AUTOMATIC PROGRAMS

In an automatic program, when you enter the settings page of one of the following functions:

- Pre-stretch;
- Carriage speed;
- Tensioning;
- High/low rpm;
- Turntable speed;
- Top-sheet;
- Cutting system;

Enter the values and press  to modify them and  or  to increase or decrease these values.











Press  or wait two seconds after entering the values to confirm the choices and exit the settings page.

Similarly, press  to cancel the choices and exit the settings page without saving.













CONTROL PANEL

Selection mode of the operations (LED on, if present, indicates the function selected).

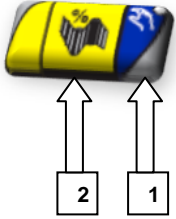





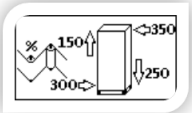




The yellow keys on the Control Panel are for automatic functions, the blue keys are for manual functions.

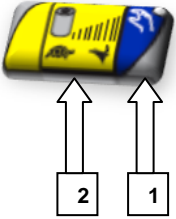




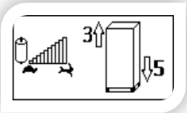




Key	Description
	<p>Automatic / Manual selector.</p> <p>Automatic (right LED on, yellow key) or Manual (left LED on, blue key) control mode.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>When you are in manual mode and press a key exclusively for use in automatic mode, this symbol will flash twice on the display.</p> </div> <div style="text-align: center;">  <p>When you are in automatic mode and press a key exclusively for use in manual mode, this symbol will flash twice on the display.</p> </div> </div>
	<p>Program.</p> <p>The letter “P” for program is steady on the display (if no other keys are activated).</p> <p>30 Programs can be saved.</p> <p><i>To save the Programs, refer to the relevant “Cycle programming” page in the “BASIC OPERATING INSTRUCTIONS” chapter.</i></p>
	<p>Special Function.</p> <p>The letter “F” for function is steady on the display (if no other keys are activated).</p> <p>11 different Special Functions can be had.</p> <p>A maximum number of 4 Special Functions per Program can be activated.</p> <p><i>For details of these Functions, refer to the relevant “Special Functions” page in the “BASIC OPERATING INSTRUCTIONS” chapter.</i></p>
	<p>Value.</p> <p>Values that can be set in the various Functions and Keys.</p>
	Press to increase the indication highlighted on the display.
	Press to decrease the indication highlighted on the display.
	<p>Confirm indication.</p> <p>Press to confirm the indication highlighted on the display.</p>
	<p>Information.</p> <p>Press to receive information on the program that appears on the display.</p> <p><i>For details of this key, refer to the relevant “Information” page in the “BASIC OPERATING INSTRUCTIONS” chapter.</i></p>

CONTROL PANEL

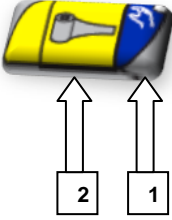

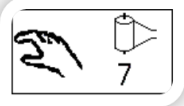



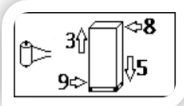




	<p>Reset. Resets the machine and the wrapping machine moves the turntable and carriage to zero position (in both manual and automatic modes).</p>
	<p>Start. Start of wrapping cycle.</p>
	<p>Stop. Stop of the wrapping machine. Types of stop are indicated here below.</p> <p>Manual mode:</p> <ul style="list-style-type: none"> - Standard (by pressing the key once): carriage stops immediately and the turntable must find the zero position before stopping; - Immediate (by pressing the key twice): carriage and turntable must stop immediately. <p>Automatic mode:</p> <ul style="list-style-type: none"> - Standard (by pressing the key once): the cycle stops. The carriage stops immediately and the turntable must find the zero position before stopping; <p>Press  to restart the cycle from the position in which it has stopped.</p> <ul style="list-style-type: none"> - Immediate (by pressing the key twice): the cycle stops. The carriage and the turntable must stop immediately.
	<p>Direct selection of Programs from 1 to 9. Press one of the keys from 1 to 9 in automatic mode and the machine immediately starts the relative program, as if the program has been selected and start has been pressed.</p>
	<p>Selection of Program with reference above 9. Press the green 1..X key to start the procedure for entering a two-digit program number (e.g. press 2 and 3 and cycle 23 starts). <u>If two seconds have elapsed:</u></p> <ul style="list-style-type: none"> • between pressing 1..X and entering the first digit, the procedure will be terminated and you will exit said procedure; • between entering the first digit and the second one, the program relative to the first digit will be selected; • after entering the second digit, the program indicated by the two digits will be selected.
	<p>Jog key for Press and Carriage</p> <p>First press manual mode. Then press  or  once to start up/down movement. Press again to stop the movement.</p>
	<p>Increase or Decrease key.</p> <p>First press manual mode. Then press  or  once to increase/decrease the highlighted indication.</p>



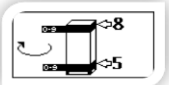




CONTROL PANEL

Key	Description
	<p>Pre-stretch key (ACTIVATED ONLY WITH CARRIAGE 2 MOTORS)</p> <p>Manual mode: press Manual selector  blue key (left LED on). Press Pre-stretch Manual mode key (right LED turns on (1)). This parameter is set on the display.</p> <div style="display: flex; align-items: center;">  <p>In Manual mode you can set the film pre-stretch value in percentage (with values from 100% to 400%, 10% stroke) using  or .</p> </div> <p>Automatic mode: press Automatic selector  yellow key (right LED on). Press Pre-stretch Automatic mode key (yellow icon (2)).</p> <div style="display: flex; align-items: center;">  <p>In Automatic mode you can set the film pre-stretch value in percentage (with values from 100% to 400%, 10% stroke) for each wrapping phase: bottom wrapping, carriage up, top wrapping, carriage down.</p> </div> <p>To switch from one value to another, use the  key and modify it using  or . Press  to exit.</p>

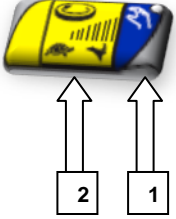





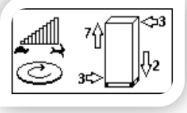




Key	Description
	<p>Carriage speed key</p> <p>Manual mode: press Manual selector  blue key (left LED on). Press carriage speed Manual mode key (right LED turns on (1)). This parameter is set on the display.</p> <p>In Manual mode you can set the carriage speed value from a minimum of 1 to a maximum of 9 with  or .</p> <p>Press the “Up” key in manual mode and the carriage will move until this key has been pressed again.</p> <p>Automatic mode: press Automatic selector  yellow key (right LED on). Press carriage speed Automatic mode key (yellow icon (2)).</p> <div style="display: flex; align-items: center;">  <p>In Automatic mode you can set the carriage speed value both during ascent and during descent. You can set the carried speed value from a minimum value of 1 (20Hz) to a maximum of 9 (60Hz).</p> </div> <p>To switch from one value to another, use the  key and modify it using  or . Press  to exit.</p>

CONTROL PANEL

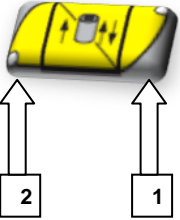




Key	Description
	<p>Stretch key</p> <p>Manual mode: press Manual selector  blue key (left LED on). Press stretch Manual mode key (right LED turns on (1)). This parameter is set on the display.</p> <p> In Manual mode you can set the film stretch from a minimum of 1 to a maximum of 9 using  or .</p> <p>Automatic Mode: press Automatic selector  yellow key (right LED on). Press stretch Automatic mode key (yellow icon (2)).</p> <p> In Automatic mode you can set the film stretch value from a minimum of 1 to a maximum of 9 for each wrapping phase: bottom wrapping, carriage up, top wrapping, carriage down.</p> <p>To switch from one value to another, use the  key and modify it using  or . Press  to exit.</p>




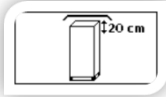

Key	Description
	<p>Top and bottom Wrapping key</p> <p>Only in Automatic Mode: press Automatic selector  yellow key (right LED on). Press top and bottom wrapping key.</p> <p> You can set the top and bottom wrapping value from a minimum of 1 to a maximum of 9.</p> <p>To switch from one value to another, use the  key and modify it using  or . Press  to exit.</p>

CONTROL PANEL



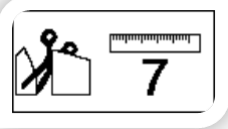

Key	Description
	<p>Turntable speed key</p> <p>Manual Mode (Turntable Jog) press Manual selector  blue key (left LED on). Press turntable speed Manual mode key (right LED turns on (1)). This parameter is set on the display.</p>  <p>In Manual mode you can set the turntable speed value from a minimum of 1 to a maximum of 9 using  or .</p> <p>Keep the key pressed to turn the turntable, release to stop it.</p> <p>Automatic Mode: press Automatic selector  yellow key (right LED on). Press turntable speed Automatic mode key (yellow icon (2)).</p>  <p>In Automatic mode you can set the turntable speed value from a minimum of 1 (30Hz / 7.5 rpm) to a maximum of 9 (60Hz / 15 rpm) for each wrapping phase: bottom wrapping, carriage up, top wrapping, carriage down.</p> <p>To switch from one value to another, use the  key a modify it using  or . Press  to exit.</p>


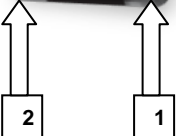





CONTROL PANEL (Function keys on the operating panel)

FUNCTION	Description
	<p><u>Single wrapping (only up) and double wrapping (up/down) function.</u></p> <p>Press Automatic selector  yellow key (right LED on). Choice of wrapping (function specifics):</p> <ul style="list-style-type: none"> - <u>Wrapping only during carriage ascent (left LED turns on (2)).</u> <p>By pressing start , the carriage reaches the bottom limit switch of the column and stops, the turntable starts rotating and performs the amount of rpms set in the bottom wrapping  (0-9). If the number of low rpms = 0, at turntable start the carriage starts ascent up to the pallet top height plus the height set in the <u>Special Function 1 "Pallet top height"</u>, i.e. to the top of the film above the top of the pallet. The carriage now stops and the turntable performs the amount of rpms set in the top wrapping  (0-9). End of cycle. - <u>Wrapping during carriage ascent and carriage descent cycles (right LED turns on (1)).</u> <p><u>Same performance as carriage ascent.</u> The carriage now descends until it reaches the bottom limit switch of the column and stops. The turntable senses the last turn and stops. Now the carriage ascends to the height set in the "Lift height carriage". (Parameter 22, settable from 0-50 cm), in the "Menu 1 hidden parameters". End of cycle.</p> <p><u>CARRIAGE BLOCK:</u> During an automatic cycle, by keeping the Wrapping Function pressed, the turntable continues turning and the carriage stops.</p> </p>

FUNCTION	Description
	<p><u>Top-sheet function</u></p> <p><u>Only in Automatic Mode (single/double wrapping)</u></p> <p>Press Automatic selector  yellow key (right LED on). Press Top-sheet Function Automatic mode key (yellow icon), LED turns on.</p> <p><u>Function specifics:</u> when the pallet top has been reached, with the turntable still rotating, the carriage descends the length set in the Top-Sheet function parameter, after which the table also stops and the machine goes in stand-by. By pressing , the turntable rotates and the carriage ascends up to the height of the pallet top and, if set, to an additional height corresponding to the Overlap parameter. High rpms are executed and from here the cycle continues normally.</p> <div style="display: flex; align-items: center;">  <p>You can set the carriage descent height value with respect to the pallet top value. The value of this descent can be set from a minimum of 5 to a maximum of 9 (5 stroke).</p> </div> <p>Press  to exit.</p>

CONTROL PANEL (Function keys on the operating panel)

FUNCTION	Description
	<p>Film cut function Must be enabled by entering “Menu 1 hidden parameters”, parameter 16 “Film cut device” = ENABLE.</p> <p>Only in Automatic Mode: press Automatic selector  yellow key (right LED on). Press Film cut Function (yellow icon), LED turns on.</p> <p><u>Function specifics:</u> Select Film cut function to enter the parameterisation page where the “film end length” is set, namely the length of the part of the film that remains between the cut and the carriage at cycle end.</p>  <p>You can set the film end length value from a minimum of 1 to a maximum of 9 (1 stroke).</p> <p>Press  to exit.</p>

FUNCTION	Description
 	<p>Top-press function Must be enabled by entering “Menu 1 hidden parameters”, parameter 6 “Top-plate menu enable” = ENABLE.</p> <p>Manual Mode: press Manual selector  blue key (left LED on). Press Top-press Manual mode key (right LED turns on (1)).</p> <p>In Manual mode this drawing appears on the display and by using the  key it moves until the package is touched.</p>  <p>Remaining in manual mode, the Pre-stretch, carriage speed, carriage stretch, top and bottom wrapping, and turntable speed keys can be accessed.</p> <p>Automatic Mode: press Automatic selector  yellow key (right LED on). Press Top-press function Automatic mode key (left LED turns on (2)).</p> <p>In Automatic mode when  is pressed, the Top-press descends until it touches the package and the cycle starts. At the end of the cycle, the Top-press will rise to the end of the column and release the package.</p>

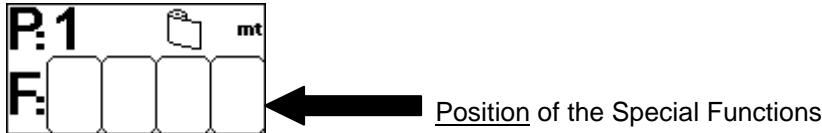
BASIC OPERATING INSTRUCTIONS






Special Functions



There are 11 special functions.

A maximum of 4 Special Functions can be applied to a program; they are shown in the bottom part of the display (highlighted below with the arrow).




By pressing the  Function key, the first drawing to appear on the display is the empty one which corresponds to no function. 

Press  once and the first function appears flashing (the selected one).

Continue pressing  or  to scroll the other functions available in the same position.

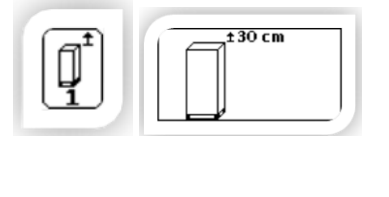



When you have selected the function, confirm with  or after 2 seconds of inactivity it will be stored.

Always press the  function key to switch from one position to another.

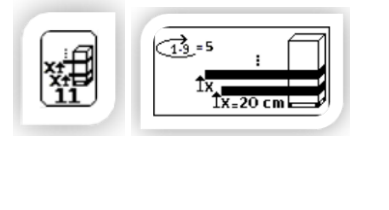



If the function has associated parameters:

When you have selected the function with the  or  keys, enter with the  key:

Example with 1 associated parameter:

	<p>If the function has only one parameter, modify the value with the  or  keys. After 2 seconds of inactivity it will be stored. After 30 seconds of inactivity you will return to the main page, or press .</p>
---	---

Example with several associated parameters:

	<p>If the function has several parameters, press  to move to the subsequent parameter. To confirm and exit the parameters, press . After 2 seconds of inactivity it will be stored. After 30 seconds of inactivity you will return to the main page, or press .</p>
---	---

If a function is set and fixed and you press  or , the function box will return flashing empty.

BASIC OPERATING INSTRUCTIONS



Special Functions

1. OVERLAP AT PALLET TOP function

		<p>The setting of this size indicates the overlap of the carriage upwards, during the ascent cycles, beyond the “Pallet top height”. This overlap can be set from a minimum of 1 cm to a maximum of 40 cm, 1 cm stroke.</p>
--	--	---

2. PRE-SET PALLET HEIGHT function

		<p>This function excludes intervention of the photocell. The value of the height set indicates the maximum stroke upwards of the film carriage. This height can be adjusted by a minimum of 50 cm to a maximum of 300 cm, 5 cm stroke. Corresponds to the top wrapping limit.</p>
--	--	---



3. START PRE-SET HEIGHT function

		<p>This setting indicates at which height the pallet wrapping cycle will start. The value can be set from a minimum of 5 cm to a maximum of 180 cm, 5 cm stroke.</p>
--	--	--

4. REPEAT ACTIVE PROGRAM function

		<p>This setting indicates how many times the machine will repeat the selected program. The value can be set from a minimum of 1 to a maximum of 9.</p>
--	--	--

5. AUTO ONLY UP with DESCENT CYCLE function

	<p>The AUTO ONLY UP with DESCENT CYCLE can be selected only if the ONLY UP cycle was selected previously.</p> <p>By pressing start , the carriage reaches the bottom limit switch of the column and stops, the turntable starts rotating and performs the amount of rpms set in the bottom wrapping (0-9). If the number of low rpms = 0, at turntable start the carriage starts ascent up to the pallet top height plus the height set in the <u>Special Function 1 “Pallet top height”</u>, i.e. to the top of the film above the top of the pallet. The carriage now stops and the turntable performs the amount of rpms set in the top wrapping (0-9). The “automatic selector” LED now starts flashing. By pressing start , the turntable starts rotating whilst the carriage descends to reach the bottom limit switch of the column and stops.</p> <p>The turntable senses the last turn and stops. Now the carriage ascends to the height set in the “Lift height carriage” (Parameter 22, settable from 0-50 cm) in the “Menu 1 hidden parameters”. End of cycle.</p>
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BASIC OPERATING INSTRUCTIONS




Special Functions

6. AUTO ONLY UP with AUTOMATIC CARRIAGE RETURN TO ZERO function



The AUTO ONLY UP with AUTOMATIC CARRIAGE RETURN TO ZERO cycle can be selected only if the ONLY UP cycle was selected previously.

By pressing start , the carriage reaches the bottom limit switch of the column and stops, the turntable starts rotating and performs the amount of rpms set in the bottom wrapping (0-9). If the number of low rpms = 0, at turntable start the carriage starts ascent up to the pallet top height plus the height set in the Special Function 1 "Pallet top height", i.e. to the top of the film above the top of the pallet. The carriage now stops and the turntable performs the amount of rpms set in the top wrapping (0-9). The "automatic selector" LED now starts flashing.

After the time set in this special function.

with turntable stopped, the carriage starts descending to reach the bottom limit switch of the column.


Now the carriage ascends to the height set in the "Lift height carriage" (Parameter 22, settable from 0-50 cm) in the "Menu 1 hidden parameters".


End of cycle.

7. AUTO ONLY UP with CARRIAGE RETURN TO ZERO function



The AUTO ONLY UP with CARRIAGE RETURN TO ZERO cycle can be selected only if the ONLY UP cycle was selected previously.

By pressing start , the carriage reaches the bottom limit switch of the column and stops, the turntable starts rotating and performs the amount of rpms set in the bottom wrapping (0-9). If the number of low rpms = 0, at turntable start the carriage starts ascent up to the pallet top height plus the height set in the Special Function 1 "Pallet top height", i.e. to the top of the film above the top of the pallet. The carriage now stops and the turntable performs the amount of rpms set in the top wrapping (0-9). The "automatic selector" LED now starts flashing.

By pressing start ,

with turntable stopped, the carriage starts descending to reach the bottom limit switch of the column.

Now the carriage ascends to the height set in the "Lift height carriage" (Parameter 22, settable from 0-50 cm) in the "Menu 1 hidden parameters".




End of cycle.

BASIC OPERATING INSTRUCTIONS


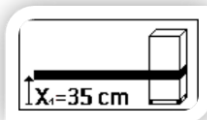


Special Functions


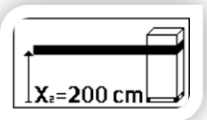
8. CYCLE ONLY DOWN function

	<p>Cycle ONLY DOWN. (Can be selected only if the double wrapping function was selected previously.)</p> <p>By pressing start , the carriage reaches the pallet top height plus the height set in the Special Function 1 "Pallet top height", i.e. to the top of the film above the top of the pallet. The carriage now stops.</p> <p>By pressing start , the turntable starts rotating and performs the amount of rpms set in the top wrapping (0-9). If the number of high rpms = 0, at turntable start the carriage starts descent until it reaches the bottom limit switch of the column and stops.</p> <p>The turntable senses the last turn and stops. Now the carriage ascends to the height set in the "Lift height carriage" (Parameter 22, settable from 0-50 cm) in the "Menu 1 hidden parameters". End of cycle.</p>
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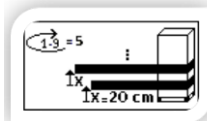
9. EXTRA PALLETFOOT WRAPS 1 function

 	<p>Set this parameter to repeat the low wraps at the height set on the display. This height can be adjusted from a minimum of 5 cm to a maximum of 40 cm, 5 cm stroke, and corresponds to the bottom limit's height of the wrapping band's film (only during carriage up).</p>
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10. EXTRA PALLETFOOT WRAPS 2 function

 	<p>Set this parameter to repeat the low wraps at the height set on the display, independently from the EXTRA PALLETFOOT WRAPS 1. This height can be adjusted from a minimum of 15 cm to a maximum of 200 cm, 5 cm stroke, and corresponds to the bottom limit's height of the wrapping band's film (only during carriage up).</p>
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11. BANDEROL PROGRAM function

 	<p>Set this parameter to repeat a certain number of wraps at multiple heights of the height set on the display. The number of wraps can be adjusted from a minimum of 1 to a maximum of 9, 1 cm stroke, whilst the distance between the two series of consecutive wraps can be set from a minimum of 15 cm to a maximum of 100 cm, 5 cm stroke, and corresponds to the bottom limit's height of the wrapping band's film (only during carriage up).</p>
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BASIC OPERATING INSTRUCTIONS



Programming of cycle

	<p>Upon machine start-up, the version of the software in the boards will be displayed for the first 5 seconds.</p>
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	<p>Immediately afterwards the page will be displayed in automatic mode. As it is the first “P” Program to be saved, keep P:01. Now, for example, enter one of the 11 available Special Functions in the first position (remember that a maximum of 4 functions can be used per program).</p>
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	<p>Press the “F” Special Function key and you will see the first empty position start flashing; press the “+” key until you reach the first Function, which is the “Overlap at pallet top” Function. Enter the function with the “V” Value key and if you want to modify the value use the “+” or “-” keys and confirm. (With several values to be modified, always use the “V” key to switch from one parameter to another.)</p>
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	<p>Press the “F” key again to enter a second special function. (Each time you press “+” or “-” to scroll the functions, the first option to be displayed is the empty function.) Continue by following the same steps as above.</p>
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	<p>The Program has now been saved. If you wish, the various <u>Function</u> values (Top-press, Top-sheet, Single or double wrapping, Film cut) and <u>Keys</u> (Pre-stretch, Carriage speed, Carriage stretch, Top and Bottom Wrapping, Turntable speed) can be modified. Press “Start” to start the wrapping cycle. At the end of the cycle, the metres of film used can be seen in the program.</p>
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	<p>To save another program simply press “P” that will start flashing (starting, for example, from the P:01 program or any other that has been programmed) and with the “+” or “-” keys to reach a new program (e.g. P:13). Save with the “confirm” key or wait two seconds.</p>
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	<p>Program direct selection Press one of the keys from 1 to 9 in automatic mode and the machine immediately starts the relative program, as if the program has been selected and start has been pressed. The 1..X key refers to two-digit programs (from 10 to 30).</p>
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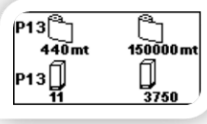
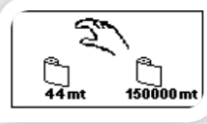
BASIC OPERATING INSTRUCTIONS



“Information” key

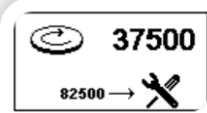



Press the  key **once** to access a series of information:

	<p>In automatic mode, starting from an active program:</p> <ul style="list-style-type: none"> • <u>the first column</u> represents the metres of film used and the pallets produced with the program shown (e.g. P13). Scroll with the “+” or “-” keys to display the rest of the programs; • <u>the second column</u> represents the total metres of film used and the total pallets produced by the wrapping machine.
	<p>In manual mode:</p> <ul style="list-style-type: none"> • <u>the first column</u> represents the metres of film used from the beginning of the activity in manual mode (the first) and the total metres of film used by the wrapping machine (second).



Press the  key **three** times to access the **MAINTENANCE COUNTER:**

	<p>The display will show the turntable’s number of rpms from the last maintenance operation or from the first installation (e.g. 37500) and the rest of the turntable’s rpms before the next maintenance operation (e.g. 82500) (Fig.1).</p>
<p>Fig.1</p> 	<p>A “Maintenance counter” number equal to 120000 (in the “Menu 1 hidden parameters” Parameter 21) will be entered in the wrapping machine by default.</p> <p>Upon reaching this value, when the machine is started the maintenance symbol (Fig.2) will be displayed and the buzzer will sound 3 beeps. After 5 seconds the warning message will disappear and it will all be repeated at subsequent start-up or upon subsequently pressing “start”.</p>
<p>Fig.2</p>	<p>To silence the beeps, set the Number Buzzer Beeps at 0 (in the “Menu 1 hidden parameters” Parameter 9).</p> <p><u>CONTACT THE FROMM ASSISTANCE SERVICE FOR MAINTENANCE OPERATIONS.</u></p> <p>Maintenance operations must be performed by FROMM trained personnel. The timer must be reset at ZERO and the alarm will disappear from the control panel.</p> <p>To reset the timer, enter the “Menu 1 hidden parameters” Parameter 4 and select YES.</p>

BASIC OPERATING INSTRUCTIONS



Parameters Lock

	<p>Simultaneously press the two “+” and “-” keys for 5 seconds.</p>
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	<p>The padlock will be steady and the enter symbol will flash.</p>
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	<p>Press “Confirm” to confirm parameters lock.</p>
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Parameters Unlock

	<p>If the parameters are locked, a padlock will appear near the program number. To <u>unlock the parameters</u>, simultaneously press the two “+” and “-” keys for 5 seconds. The <u>Password (2203)</u> will be requested on the display. The first asterisk will flash; use the “+” and “-” keys to enter the first value and press “confirm”, and so forth up to the last value. (The Password number is found in the “Menu 1 hidden parameters Parameter 19, 2203 by default, and we strongly recommend you do not modify it. If you forget it you must reset the software.)</p>
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	<p>The padlock will be steady and the enter symbol will flash.</p>
--	--

	<p>Press “Confirm” to confirm parameters unlock.</p>
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BASIC OPERATING INSTRUCTIONS



“Turntable Zero” position

If there is a voltage drop, even caused directly by the operator (e.g. by pressing Emergency), the turntable zero position can be restored:

	<p>Simultaneously press the two “Stop” and “Reset” keys for 5 seconds. If necessary, press them several times.</p>
	<p>You will enter the search procedure of the turntable zero position and the display will show the drawing to the side. The disk will turn for a third of its diameter. Repeat the procedure until you reach the turntable zero position.</p>

MACHINE DECOMMISSIONING



SYSTEM STOP

During machine decommissioning, before its dismantling, you must:

- Disconnect the machine from the electrical energy sources;

DISMANTLING AND DISPOSAL

During machine dismantling, carefully follow the provisions regarding lifting and handling described in the manuals of the single machines.

In particular:

- Do not use ropes or cables that are non-compliant or worn or with lifting capacity not suitable for the weight of the machine;
- Carefully move the machine and ensure that there are no people within the action range of the lifting equipment;
- Do not stand under suspended loads;
- Pay particular attention to suspended parts and any resulting risks.

DISPOSAL AND SCRAPPING

For disposal of the machines when they are decommissioned, there are no major problems regarding components or materials at risk. Once the single components have been dismantled, divide them according to their material.

Ferrous material: frame, guards, fittings, etc.

Aluminium: flanges, etc.

Plastic material: gaskets, cables, etc.

Electrical material: motors, panels, equipment.

During disposal, recover the components that can be recycled and reused.

ALL MACHINE COMPONENTS, AFTER HAVING BEEN DIVIDED ACCORDING TO THE MATERIAL, MUST BE DISPOSED OF BY SPECIALISED COMPANIES THAT OPERATE IN COMPLIANCE WITH THE LAWS IN FORCE IN THE USER'S COUNTRY.